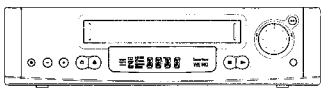
Video Cassette Recorder Laufwerk:Turbo Drive QUEEN volume

Service
Service
Service

VR171/02/13/16/58
VR175/02/05/13/16/39
VR276/02/39
VR277/02/05
VR475/02/16/39/58
VR476/39
VR477/02/39/58
VR675/02/05/16/39
VR676/02/05/39
SB100/03/11/38
SB105/03/11/38
SB205/02
SB405/11/38
SB505/38
SB605/03/11/38
SB705/38
DV105/05
DV605/05
20DV7/39
25DV7/39
45DV7/39
65DV7/39
MV1971

VRx71, VRx75

VR276, VR476


VR277, VR477, VR676

SB100,SBx05

DVx05, xxDV7, MV1971

Service Manual

Evolution: AA

Inhalt

Kapitel

1 Inhaltsangabe
Übersicht der Sonderfunktionen
Übersicht der Printplatten
Technische Daten
Sicherheitshinweise
Ergänzungs-Service-Informationen
Vorder- und Rückansicht des Gerätes
Beschreibung der Bedienelemente und Bedienung

2 Ausbauanleitung
Servicearbeiten an SMD's
Schaltungsbeschreibungen
Servicetestprogramm

3 Elektrische Einstellvorschriften
Übersicht der Abkürzungen
Verdrahtungsplan
Blockschaltbild
Printplatten-Bauteilelageplan
Prinzipschaltpläne
Meßdaten

4 Laufwerksdokumentation
Einstellungen
Explosionsansicht des Laufwerkes
Laufwerks-Stückliste

5 Explosionsansicht des Gehäuses
Stücklisten für Gehäuse und Printplatten

Versionsübersicht:

/02/03	PAL B/G, VPS/PDC
/05	PAL I, England
/07	PAL I, Irland
/08	PAL B/G, Italien
/11	PAL B/G Belgien
/13	PAL B/G, Skandinavien
/16	PAL B/G, Spanien
/38/39	SECAM L, L' & PAL B/G, I
/58/59	PAL/SECAM B/G, D/K
/60	PAL/SECAM, D/K

Fernbedienungsübersicht:

SB100/03/11, SB105/03/11, SB205/02, SB405/11, SB605/03/11, DV105/05, DV605/05, MV1971	RT170/301	4822 219 10255
SB100/38, SBx05/38, 20DV7/39, x5DV7/39	RT170/304	4822 219 10254
VR171/02/13/16/58, VR175/02/05/13/16, VR475/02/16/58, VR675/02/05/16	RT172/101	4822 218 10256
VR175/39, VR475/39, VR675/39	RT172/104	4822 218 10253
VR276/02, VR277/02/05, VR477/02/58, VR676/02/05	RT174/101	4822 218 10252
VR276/39, VR476/39, VR477/39, VR676/39	RT174/104	4822 218 10251

Bei jeder Reparatur sind die geltenden Sicherheitsvorschriften zu beachten. Der Originalzustand des Geräts darf nicht verändert werden, für Reparaturen sind Original-Ersatzteile zu verwenden.

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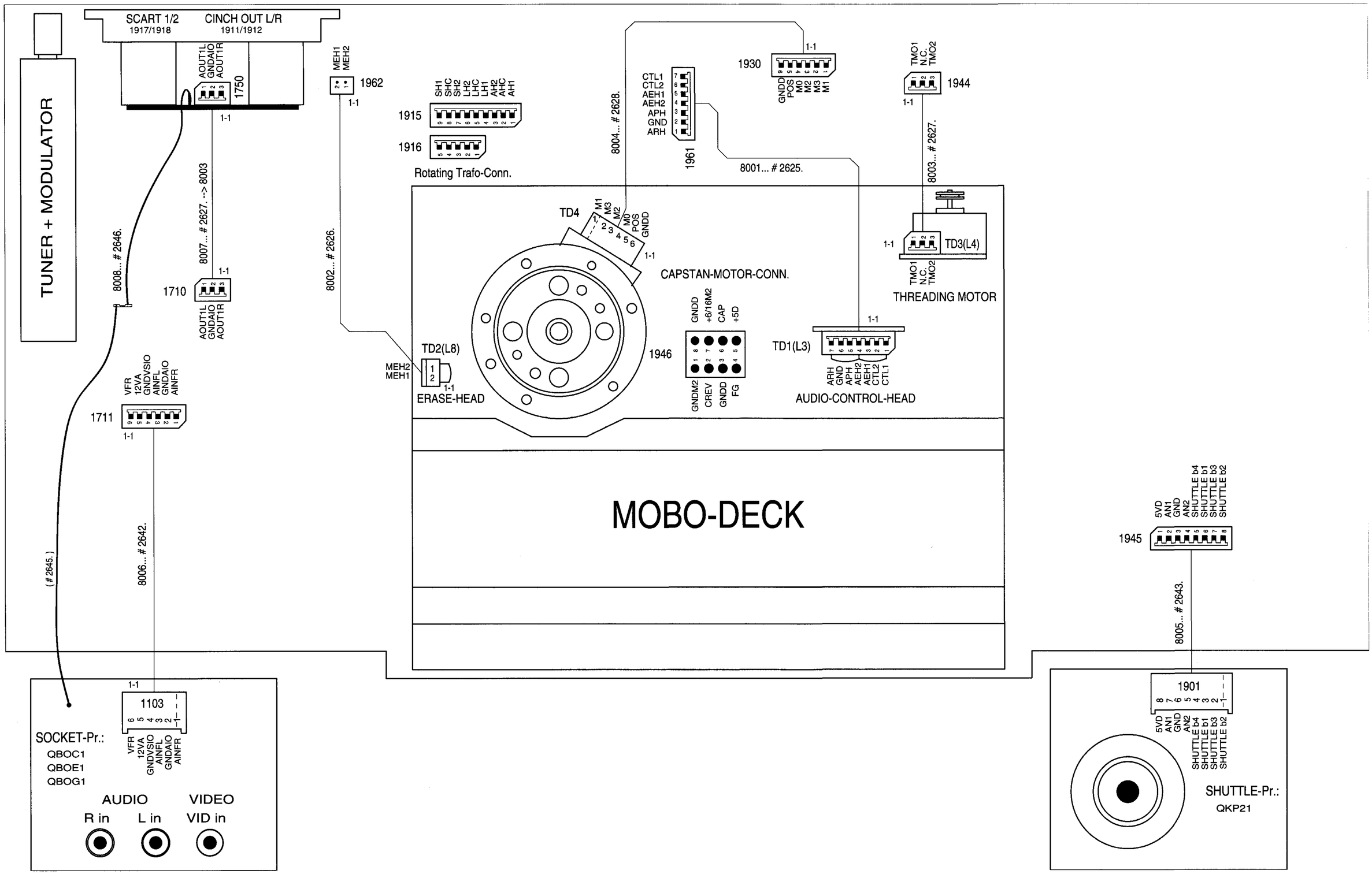
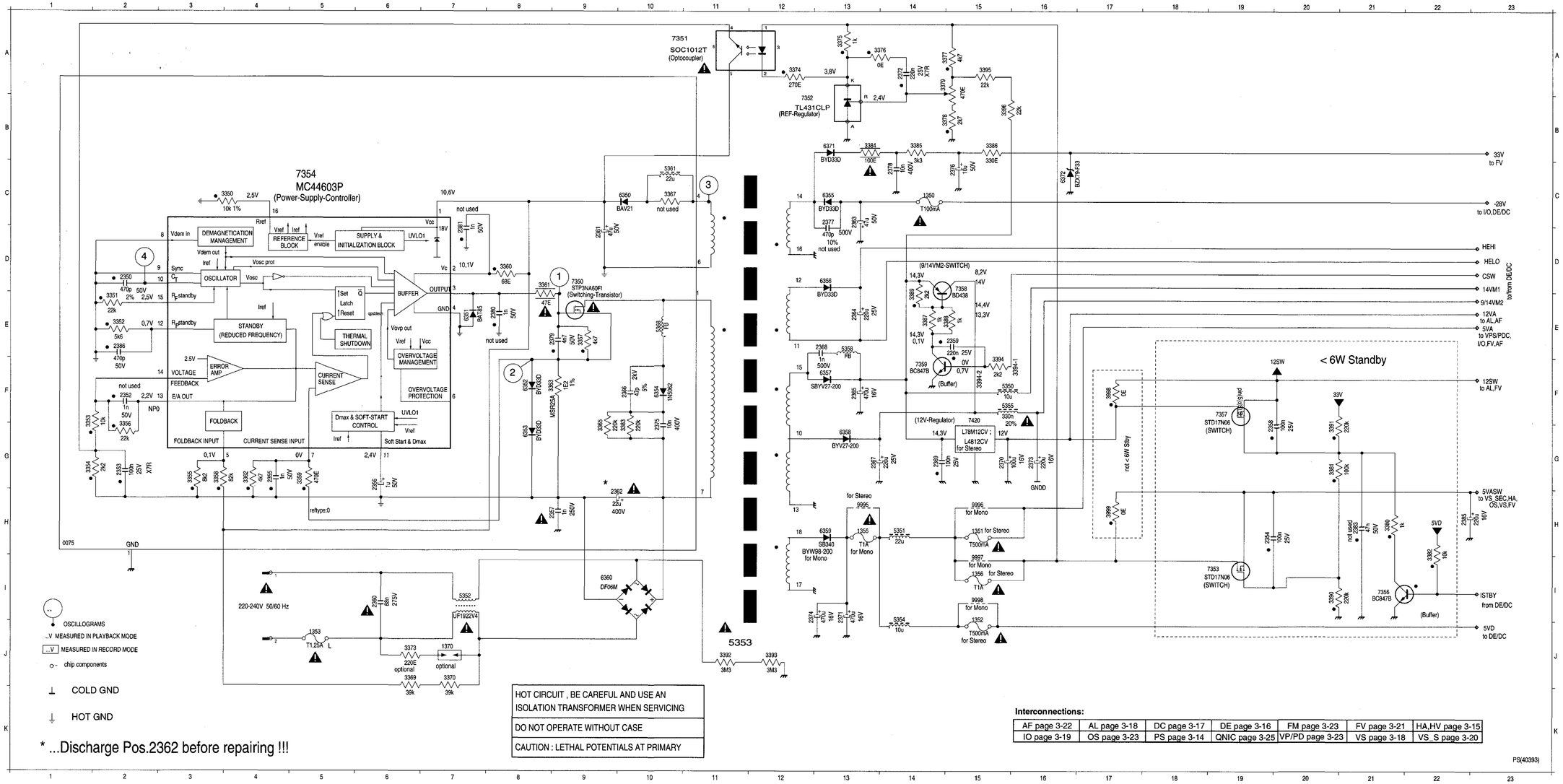
PCS 77235 D

Wiring Diagram



3-14

Power Supply (PS)



Interconnections:

AF page 3-22	AL page 3-18	DC page 3-17	DE page 3-16	FM page 3-23	FV page 3-21	HA,HV page 3-15
IO page 3-19	OS page 3-23	PS page 3-14	QNIC page 3-25	VP/PD page 3-23	VS page 3-18	VS_S page 3-20

0075 H 1
1350 C14
1351 H15
1352 J15
1353 J 5
1355 H13
1356 I15
1370 J 7
2350 D 2
2352 F 2
2353 G 2
2354 H19
2355 G 4
2356 G 6
2357 H 9
2358 G19
2359 E15
2360 I 6
2361 D 9
2362 H 9
2363 C13
2364 E13
2365 F13
2366 F10
2367 G13
2368 E13
2369 G14
2370 G15
2371 I13
2372 A14
2373 G16
2374 I12
2375 G10
2376 C15
2377 C13
2378 C14
2379 E 9
2380 E 8
2381 D 7
2383 H21
2385 H22
2386 E 2
3350 C 4
3351 E 2
3352 F 2
3353 F 1
3354 G 1
3355 G 3
3356 G 2
3357 E 9
3358 G 3
3359 G 5
3360 D 8
3361 D 8
3362 G 4
3363 F 9
3365 G 9
3367 C10
3369 J 6
3370 J 7
3373 J 6
3374 A12
3375 A13
3376 A14
3377 A15
3378 B15
3379 A14
3380 H21
3381 G20
3382 H22
3383 G10
3384 B13
3385 B14
3386 B15
3387 E14
3388 E15
3389 E14
3390 I20
3391 G20
3392 J11
3393 J12
3394 F15
3395 A15
3396 B15
3998 F17
3999 H17
5350 F15
5351 H14
5352 I 7
5353 J11
5354 J14
5355 F15
5358 E13
5361 C10
5368 E10
6350 C10
6351 E 7
6352 F 8
6353 G 8
6354 F10
6355 C13
6356 D13
6357 F13
6358 G13
6359 H13
6360 I 9
6371 B13
6372 C18
7350 D 8
7351 A10
7352 B12
7353 I19
7354 C 5
7356 I21
7357 F19
7358 D15
7359 F14
7420 F15
9995 H13
9996 H15
9997 I15
9998 I15

A: DC, 2 V/Div, 2us/Div
T 7350 Gate

A: DC, 2 V/Div, 5us/Div
T 7350 Gate

A: DC, 200mV/Div, 2us/Div
T 7350 Source

A: DC, 100mV/Div, 5us/Div
T 7350 Source

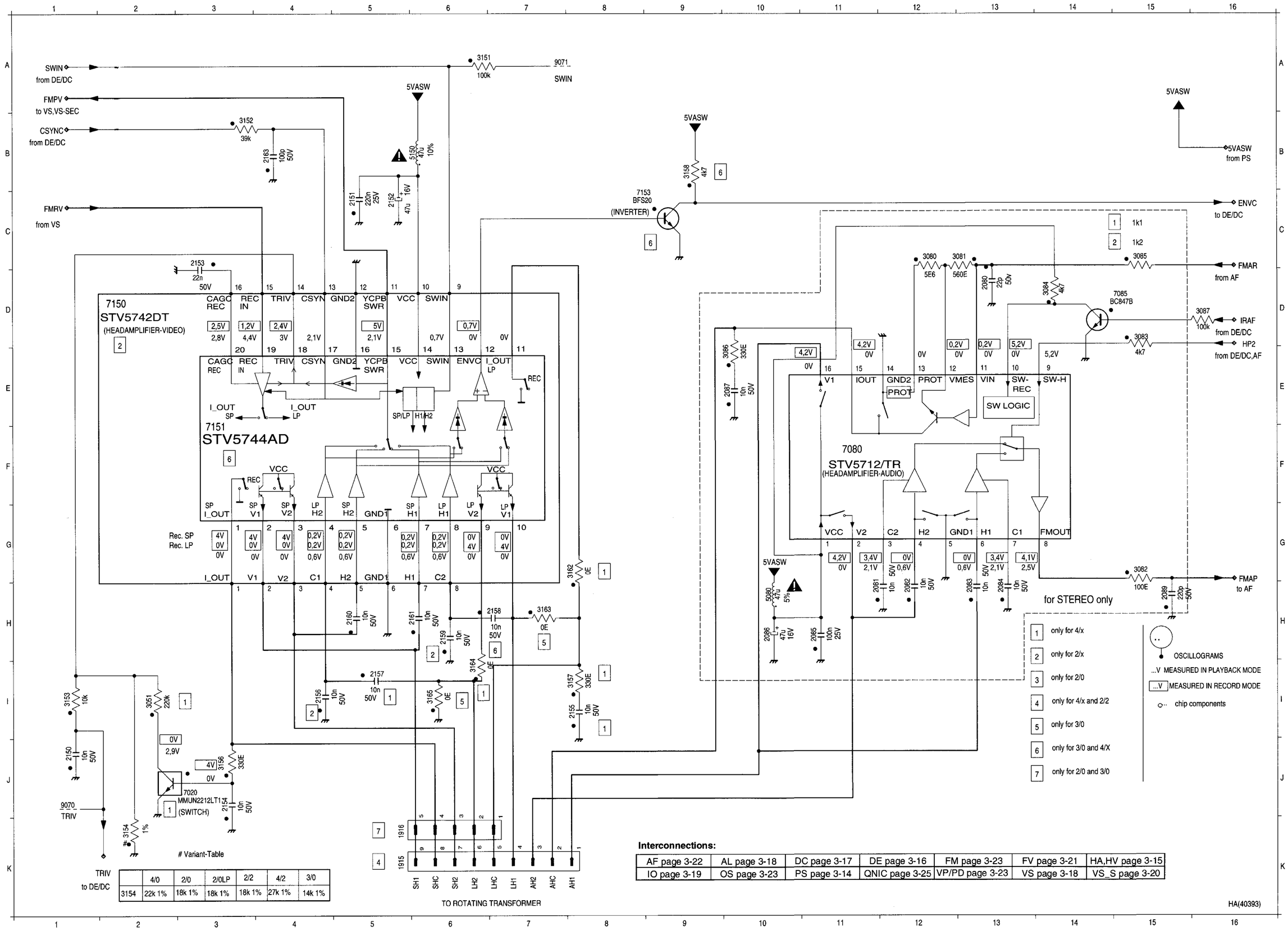
A: DC, 10 V/Div, 2us/Div
5353 Pin 4

A: DC, 10V/Div, 5us/Div
5353 Pin 4

A: DC, 500mV/Div, 2us/Div
IC 7354 Pin 10

A: AC, 500mV/Div, 5us/Div
IC 7354 Pin 10

Head Amplifier (HA)

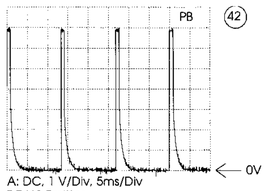


Interconnections:

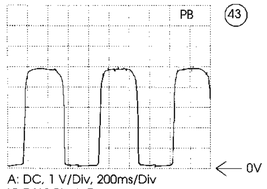
AF page 3-22	AL page 3-18	DC page 3-17	DE page 3-16	FM page 3-23	FV page 3-21	HA,HV page 3-15
IO page 3-19	OS page 3-23	PS page 3-14	QNIC page 3-25	VP/PD page 3-23	VS page 3-18	VS_S page 3-20

3-16

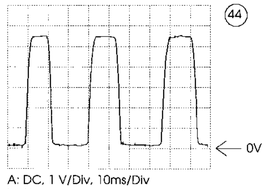
Deck Electronics (DE)



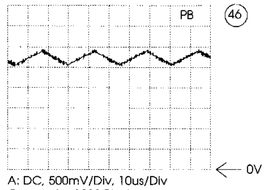
A: DC, 1 V/Div, 5ms/Div
T 7463 Emitter



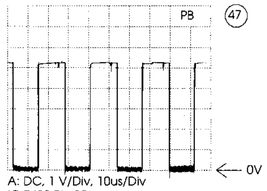
A: DC, 1 V/Div, 200ms/Div
IC 7460 Pin 6, 7



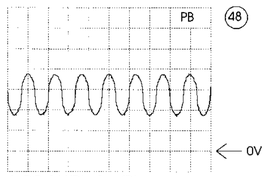
A: DC, 1 V/Div, 10ms/Div
7466



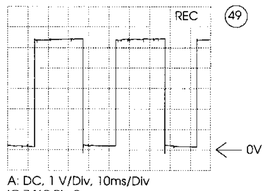
A: DC, 500mV/Div, 10us/Div
Connector 1930 Pin 6



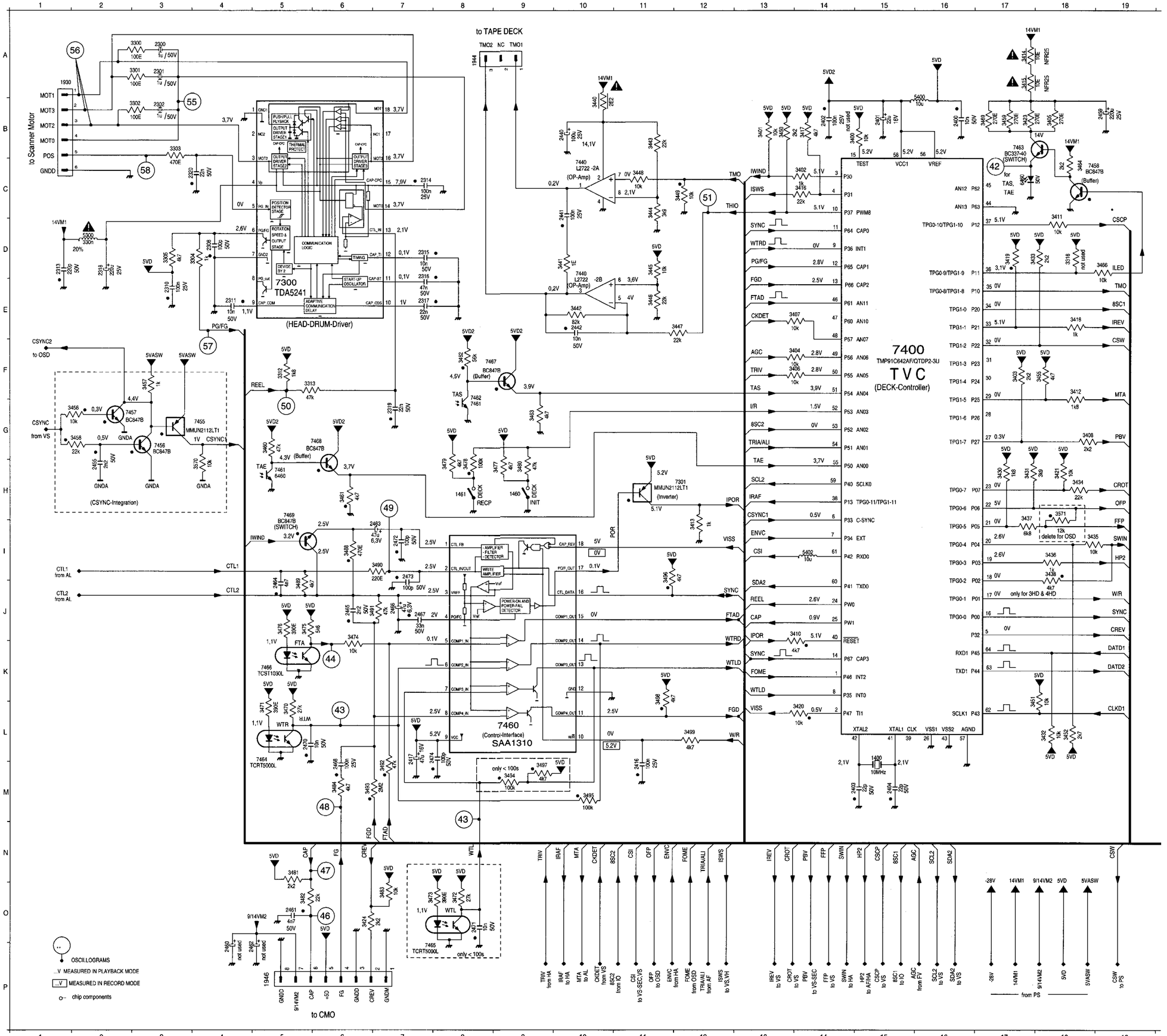
A: DC, 1 V/Div, 10us/Div
IC 7400 Pin 25



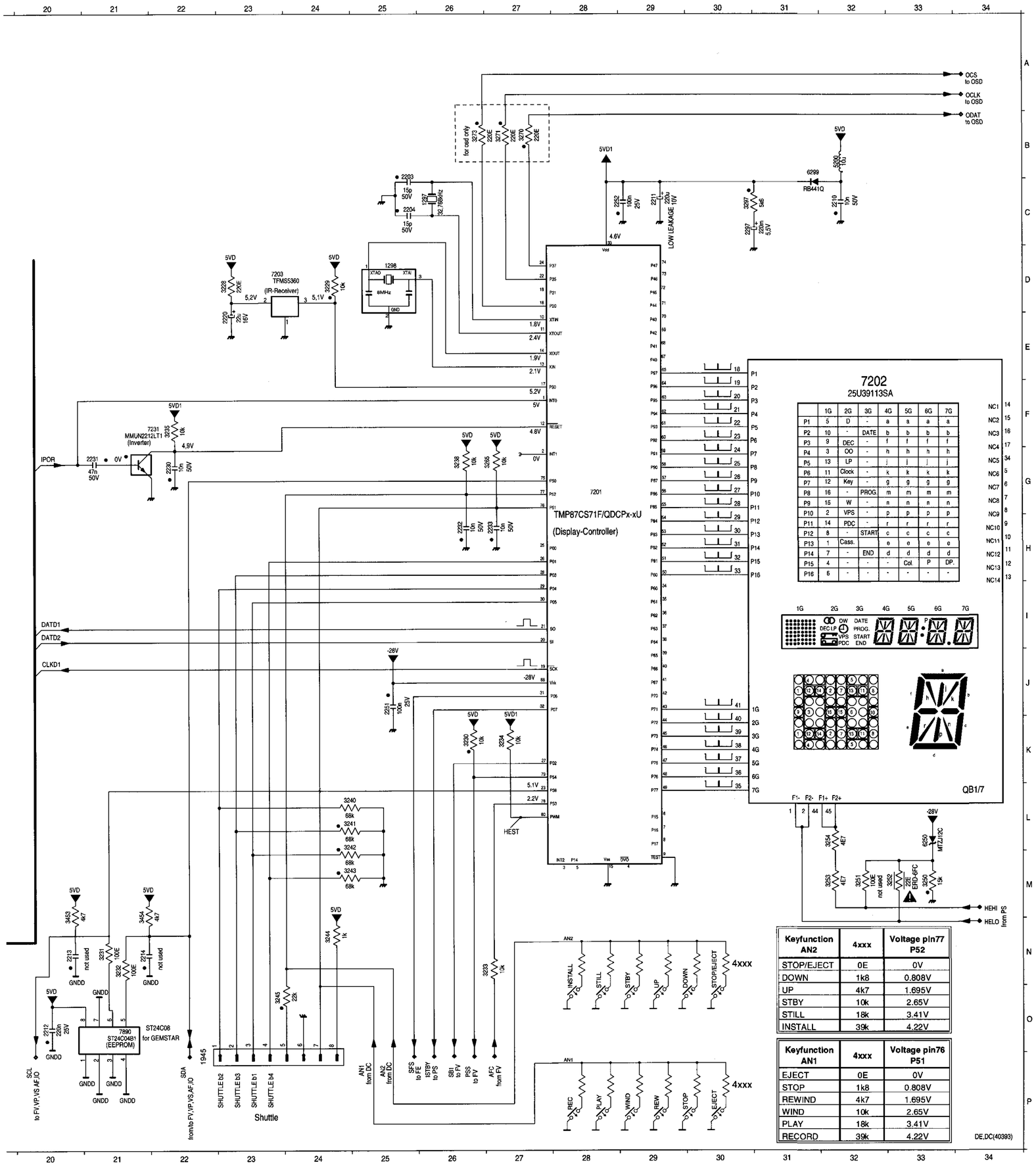
A: DC, 1 V/Div, 1ms/Div
Connector 1946 Pin 4



A: DC, 1 V/Div, 10ms/Div
IC 7460 Pin 2



Display Control (DC)



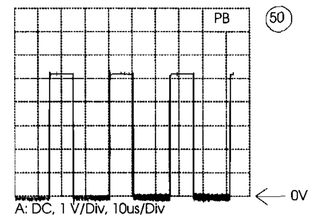
Keyfunction AN2	4xxx	Voltage pin77 P52
STOP/EJECT	0E	0V
DOWN	1k8	0.808V
UP	4k7	1.695V
STBY	10k	2.65V
STILL	18k	3.41V
INSTALL	39k	4.22V

Keyfunction AN1	4xxx	Voltage pin76 P51
EJECT	0E	0V
STOP	1k8	0.808V
REWIND	4k7	1.695V
WIND	10k	2.65V
PLAY	18k	3.41V
RECORD	39k	4.22V

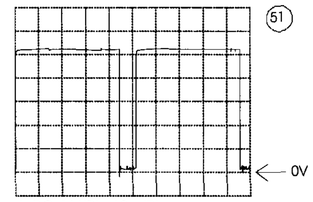
1297 C26
1298 D25
1400 L15
1460 H 9
1461 H 8
1930 A 2
1944 A 8
1945 O22
1946 P 5
2203 B25
2204 C25
2210 C32
2211 C29
2212 O20
2213 N20
2214 N21
2220 E23
2230 G22
2231 G21
2232 H26
2233 H27
2251 J25
2252 C29
2297 C30
2300 A 3
2301 A 3
2302 B 3
2306 D 4
2310 E 3
2311 E 4
2313 D 1
2314 C 7
2315 D 7
2316 D 7
2317 E 7
2318 D 2
2319 G 7
2320 C 4
2400 B16
2401 B15
2402 B14
2403 M15
2404 M15
2416 M11
2417 L 7
2440 B10
2441 C10
2442 E10
2455 H 2
2459 B19
2460 P 4
2461 O 5
2462 P 5
2463 I 7
2464 J 5
2465 J 6
2466 J 7
2467 J 7
2468 M 6
2470 L 5
2471 O 8
2472 I 7
2473 I 7
2474 L 8
3228 D23
3229 D24
3230 K26
3231 N21
3232 N21
3233 N27
3234 K27
3235 F22
3238 G26
3240 L24
3241 L24
3242 L24
3243 M24
3244 N24
3245 O23
3250 M33
3251 M32
3252 M33
3253 M32
3254 L32
3265 G27
3270 B27
3271 B27
3273 B26
3297 C30
3300 A 3
3301 A 3
3302 B 3
3303 B 3
3304 D 4
3305 D 3
3312 F 5
3313 F 5
3316 D18
3400 B14
3401 B13
3402 C14
3403 F17
3404 F14
3405 B18
3406 F14
3407 E14
3408 G18
3410 J14
3411 C18
3412 F18
3413 I12
3414 A17
3415 A17
3416 C14
3417 B14
3418 E18
3419 D17
3420 L14
3421 H18
3423 B17
3424 O 6
3430 H17
3431 H17
3432 L18
3433 D17
3434 H18
3435 I18
3436 I18
3437 H17
3438 I18
3440 B10
3441 D10
3442 E10
3443 B11
3444 C11
3445 D11
3446 E11
3447 E12
3448 C11
3449 C12
3450 B13
3451 K17
3452 L18
3453 M20
3454 M21
3455 F18
3456 G 2
3457 F 3
3458 G 2
3459 B17
3460 G 5
3461 H 6
3462 F 8
3463 G 9
3464 C18
3466 D19
3469 B17
3470 L 5
3471 L 5
3472 O 8
3473 O 7
3474 J 6
3475 J 5
3476 J 5
3477 H 9
3478 H 8
3479 H 8
3480 H 9
3481 N 5
3482 O 5
3483 O 7
3484 M 6
3488 I 6
3489 J 5
3490 I 7
3491 J 7
3492 M 7
3493 M 6
3494 M 9
3495 M10
3496 I11
3497 M 9
3498 K11
3499 L12
3570 H 4
3571 H18
5200 B32
5300 D 2
5400 B16
5402 I14
6250 L33
6299 B31
6460 C17
7201 G28
7202 F32
7203 D23
7231 F22
7300 E 5
7301 H12
7400 F15
7440 C10
7440 D10
7455 G 4
7456 G 3
7457 G 2
7458 C19
7460 L 9
7461 H 5
7462 F 8
7463 B17
7464 L 5
7465 P 7
7466 K 5
7467 F 8
7468 G 5
7469 H 5
7890 O21

Interconnections:

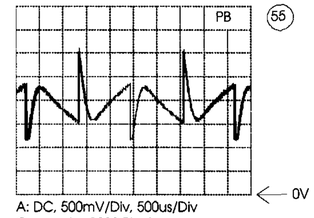
AF page 3-22
AL page 3-18
DC page 3-17
DE page 3-16
FM page 3-23
FV page 3-21
HA,HV page 3-15
IO page 3-19
OS page 3-23
PS page 3-14
QNIC page 3-25
VP/PD page 3-23
VS page 3-18
VS_S page 3-20



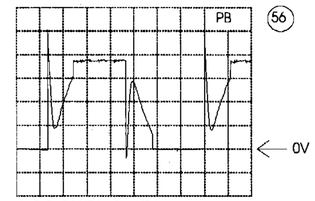
A: DC, 1 V/Div, 10us/Div
IC 7400 Pin 24



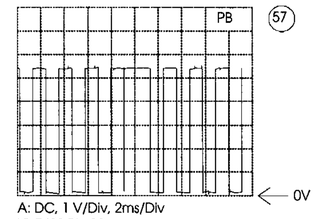
A: DC, 1 V/Div, 10us/Div
IC 7400 Pin 10



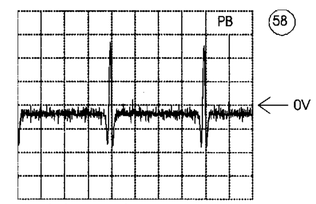
A: DC, 500mV/Div, 500us/Div
Connector 1930 Pin 4



A: DC, 2 V/Div, 1ms/Div
Connector 1930 Pin 1, 2, 3



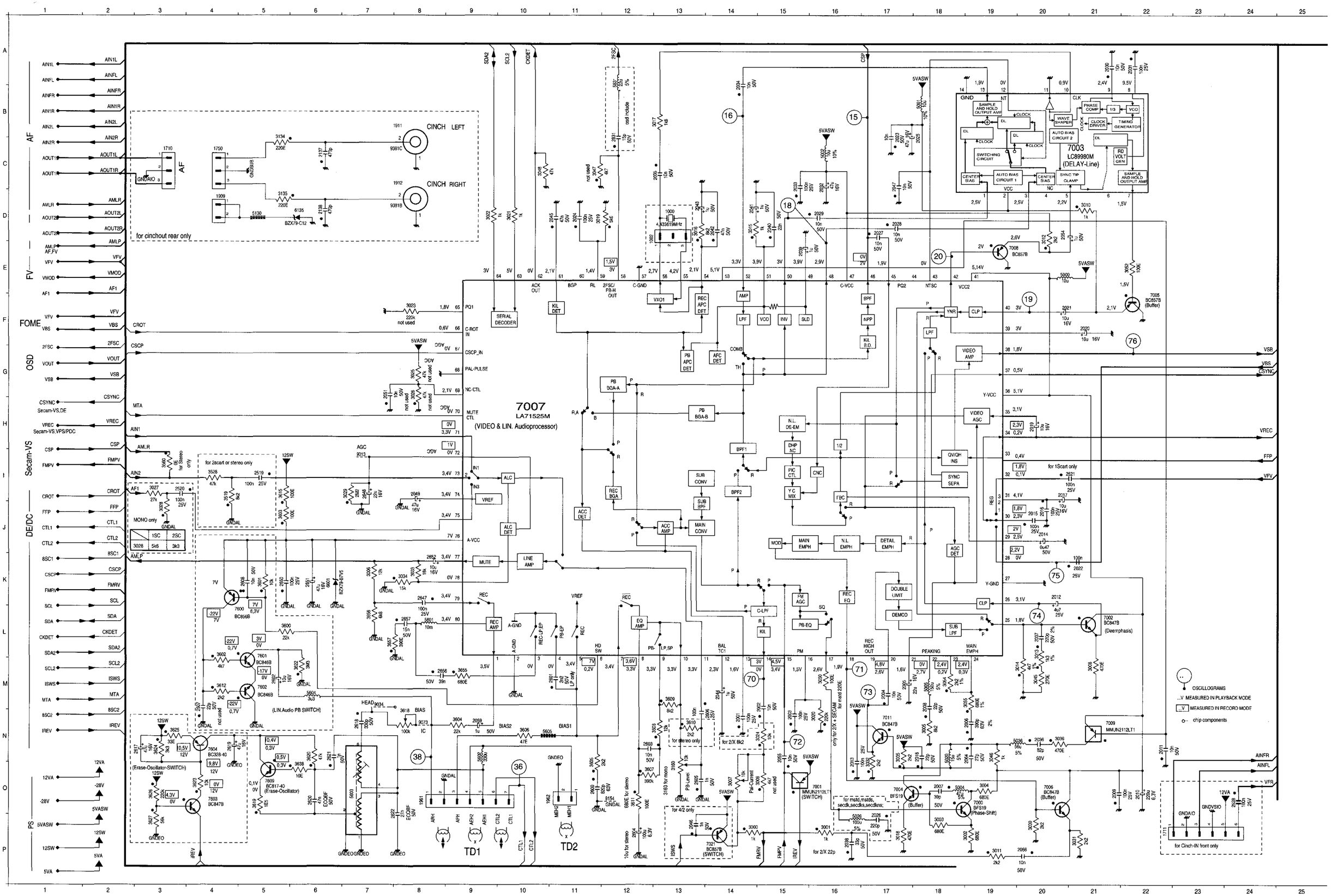
A: DC, 1 V/Div, 2ms/Div
IC 7400 Pin 12



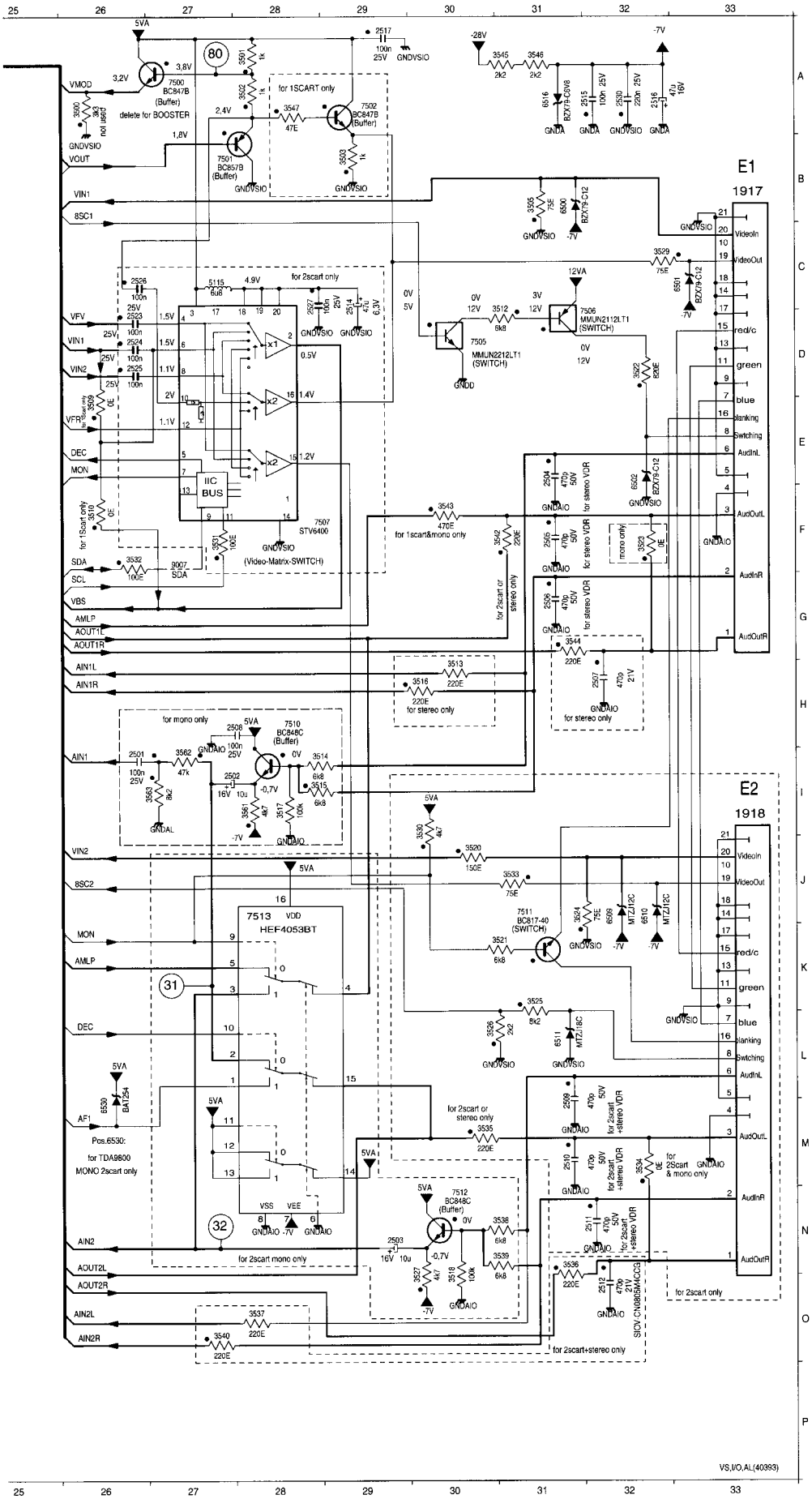
A: DC, 2 V/Div, 10ms/Div
Connector 1930 Pin 5

3-18

Video Signal Processing (VS), Audio Linear (AL)



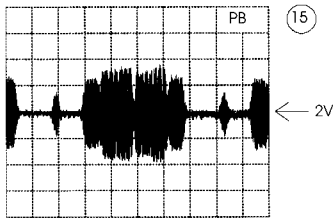
In/Out (I/O)



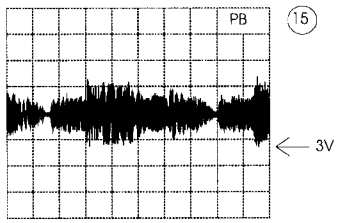
1000 D13	3023 F 8	7506 C31	
1002 E12	3024 N15	7507 F29	
1710 C 3	3025 G 8	7510 H28	
1711 P22	3026 G 8	7511 J31	
1750 C 4	3027 I 3	7512 N30	
1909 D 4	3028 J 3	7513 J28	
1911 B 8	3029 I 7	7600 L 5	
1912 C 8	3030 P20	7601 L 5	
1917 B33	3031 P21	7602 M 5	
1918 I33	3032 N17	7603 O 4	
1961 O 8	3033 K 8	7604 N 4	
1962 O10	3034 K 8	7609 O 5	
2001 N14	3035 N17	9007 F27	
2002 M15	3036 N20	9013 I 7	
2003 N15	3045 M20	9034 M 7	
2004 M17	3046 N19	9073 N 8	
2005 M17	3047 C11	9154 O12	
2006 N19	3048 C10		
2007 O18	3050 M16		
2008 M18	3052 E22		
2009 O21	3054 M18		
2010 O22	3055 M19		
2011 N22	3134 C 5		
2012 K20	3135 D 5		
2013 N16	3160 O13		
2014 J20	3500 A26		
2015 J20	3501 A28		
2016 J20	3502 A28		
2017 I20	3503 B29		
2018 N18	3505 B31		
2019 H20	3509 E26		
2020 F21	3510 F26		
2021 F20	3512 D31		
2022 K21	3513 H30		
2023 B17	3514 I28		
2024 D11	3515 I28		
2025 B18	3516 H30		
2026 P17	3517 I28		
2027 D17	3518 N30		
2028 D17	3519 I 4		
2029 D16	3520 J30		
2030 A21	3521 K31		
2031 A22	3522 D32		
2032 C16	3523 F32		
2033 C15	3524 J31		
2034 A14	3525 K31		
2035 C13	3526 L30		
2036 N20	3527 N30		
2037 L20	3528 I 4		
2038 P16	3529 C32		
2039 E15	3530 I30		
2040 D15	3531 F27		
2041 D14	3532 F26		
2042 D14	3533 J31		
2043 D13	3534 M32		
2044 M14	3535 M30		
2045 D11	3536 N31		
2046 P13	3537 O28		
2047 C17	3538 N31		
2049 I 8	3539 N31		
2051 G 7	3540 O27		
2054 D20	3542 F31		
2055 N15	3543 F30		
2059 N 9	3544 G31		
2064 N19	3545 A31		
2066 P20	3546 A31		
2137 C 6	3547 A28		
2138 D 6	3560 I 3		
2501 I26	3561 I28		
2502 I27	3562 I27		
2503 N29	3563 I27		
2504 E31	3600 L 5		
2505 F31	3601 K 5		
2506 G31	3602 L 4		
2507 H32	3603 J 5		
2508 H28	3604 N 9		
2509 M31	3605 N11		
2510 M31	3606 N10		
2511 N32	3607 O12		
2512 O32	3608 N13		
2514 C29	3609 M13		
2515 A32	3610 N13		
2516 A32	3611 O12		
2517 A29	3612 M 4		
2519 I 5	3615 I 5		
2520 I 3	3618 N 8		
2521 I21	3619 O 5		
2523 D26	3620 N 6		
2524 D26	3622 M 6		
2525 D26	3623 O 4		
2526 C26	3624 N 3		
2527 C28	3625 N 3		
2528 O24	3626 O 3		
2530 A32	3627 P 3		
2600 O11	3638 O 6		
2601 M11	3655 M 9		
2602 M 5	3656 L 7		
2603 N12	3657 L 7		
2604 P12	5000 E20		
2605 O13	5001 B18		
2606 N14	5002 C16		
2607 M 4	5004 O18		
2608 K 5	5005 M18		
2617 N 3	5020 N18		
2618 N 7	5026 P16		
2619 N 4	5036 N20		
2620 O 6	5115 C27		
2621 N 6	5130 D 5		
2622 O 8	5601 L 8		
2647 K 8	5602 N 9		
2648 I 7	5603 O 7		
2650 K 5	5604 M 6		
2651 K 6	5605 N10		
2652 K 8	5831 A12		
2656 M 8	6135 D 6		
2657 L 8	6500 B31		
2831 B12	6501 C33		
3000 P14	6502 E32		
3001 P16	6509 J32		
3002 P19	6510 J32		
3003 P18	6511 L31		
3004 O19	6516 A31		
3005 N18	6530 M26		
3006 K 7	6601 K 6		
3007 O14	7000 O19		
3008 M21	7001 O16		
3009 O15	7002 L21		
3010 D21	7003 C20		
3011 P19	7004 O17		
3012 D20	7005 F22		
3013 L20	7006 O20		
3014 M20	7007 H10		
3015 D14	7008 E19		
3016 D13	7009 N21		
3017 B13	7011 N17		
3018 P17	7021 P14		
3019 D11	7500 A27		
3020 N16	7501 B27		
3021 D10	7502 A29		
3022 D 9	7505 D30		

Interconnections:

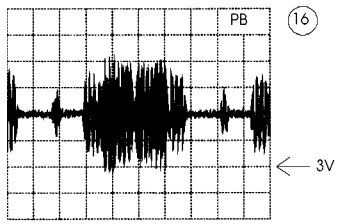
AF page 3-22
AL page 3-18
DC page 3-17
DE page 3-16
FM page 3-23
FV page 3-21
HA,HV page 3-15
IO page 3-19
OS page 3-23
PS page 3-14
QNIC page 3-25
VP/PD page 3-23
VS page 3-18
VS_S page 3-20



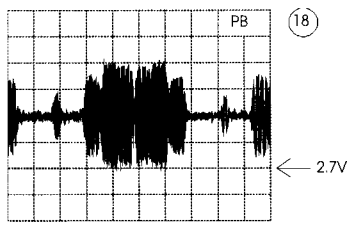
A: AC, 100mV/Div, 10us/Div
IC 7007 Pin 46 (PAL)



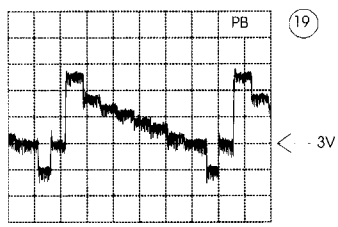
A: AC, 100mV/Div, 10us/Div
IC 7007 Pin 46 (SECAM L)



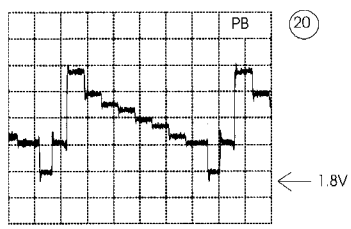
A: AC, 100mV/Div, 10us/Div
IC 7007 Pin 52



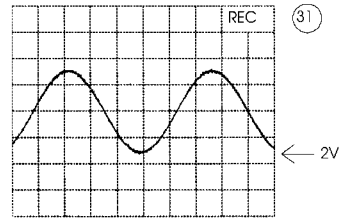
A: AC, 100mV/Div, 10us/Div
IC 7007 Pin 48/50



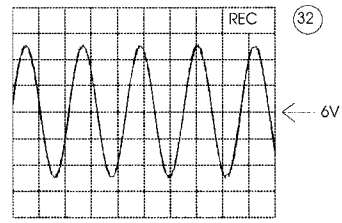
A: AC, 500mV/Div, 10us/Div
IC 7007 Pin 40



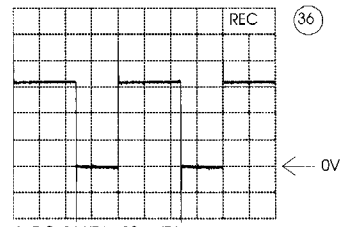
A: AC, 100mV/Div, 10us/Div
IC 7007 Pin 42



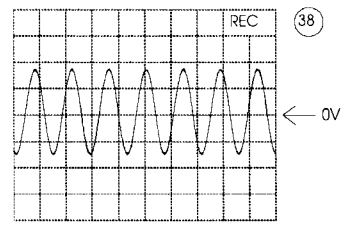
A: AC, 500mV/Div, 200us/Div
Modulator Pin 3



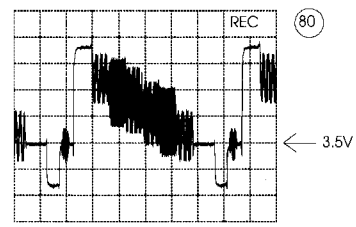
A: AC, 200mV/Div, 500us/Div
C 2503



A: DC, 1 V/Div, 10ms/Div
Connector 1961 Pin 7



A: DC, 1 V/Div, 10us/Div
Connector 1951 Pin 1



A: AC, 100mV/Div, 10us/Div
T 7500 Emitter

3-20

Video Signal Processing Secam (VS_S)

for MSTD or SECAM-L only

VREC from VS
CSYNC from VS
PBV from DE/DC
FMPV from VS
FMRV to HA
CSI from DE/DC
CSP to VS
5VASW from PS

7710 TDA4722/V2 (SECAM-Chroma-Processor)

LIMITER/ BLANKING
POWER
DIVIDER by 4
LIMITER
AGC DETECTOR 1,1MHz
RECTIFIER f x2
VOLTAGE REFERENCE 2,5V
MIXER x2
SWITCH INTERFACE
COLOR KILLER
10dB
6dB
15dB
CK
LF CL/ANTICLOCHE
5103 CLOCHE 42415 4.286MHz
5100 ANTICLOCHE 42415 4.286MHz
42414 1.0715MHz

Interconnections:

AF page 3-22	AL page 3-18	DC page 3-17	DE page 3-16	FM page 3-23	FV page 3-21	HA,HV page 3-15
IO page 3-19	OS page 3-23	PS page 3-14	QNIC page 3-25	VP/PD page 3-23	VS page 3-18	VS_S page 3-20

OSCILLOGRAMS
...V MEASURED IN PLAYBACK MODE
...V MEASURED IN RECORD MODE
chip components

VS_S(40393)

2100 C13
2101 B12
2102 B12
2103 C11
2104 C10
2105 D 9
2106 B10
2107 B 9
2108 B 8
2109 B 7
2110 A 7
2111 B 7
2112 B 6
2113 D 8
2115 B 5
2116 E 2
2117 C 2
2118 C 3
2119 G 4
2121 I 3
2122 I 8
2123 I 9
2124 J 9
2125 K 2
2126 J 2
2128 K 3
2129 J10
2130 I10
2132 I11
2133 I12
2134 J11
2135 J 4
3100 C14
3101 D14
3102 B13
3103 A12
3104 B11
3105 B11
3106 B10
3107 B 9
3109 A 8
3110 C 8
3111 B 7
3112 B 5
3113 B 5
3114 A 3
3115 I 7
3116 F 4
3117 F 2
3118 H 4
3119 I 3
3120 F 4
3121 K 1
3122 J 4
3123 I 5
3124 I 6
3125 J 7
3126 I 9
3127 I10
3128 J13
3129 C 2
3155 E 1
3159 E 4
5100 B14
5101 B13
5102 B12
5103 A11
5104 B 8
5105 B 8
5106 D 3
5107 J10
5108 J 6
5111 K 3
5112 K 2
5113 I11
5114 K 4
6100 B 3
7100 B11
7101 A10
7102 B 6
7103 A 5
7104 B 4
7105 E 3
7106 H 3
7110 F 9

REC (14)
A: DC, 1 V/Div, 10us/Div
R 3114

REC (60)
A: DC, 500mV/Div, 10us/Div
R 3109

REC (62)
A: AC, 50mV/Div, 10us/Div
IC 7110 Pin 29

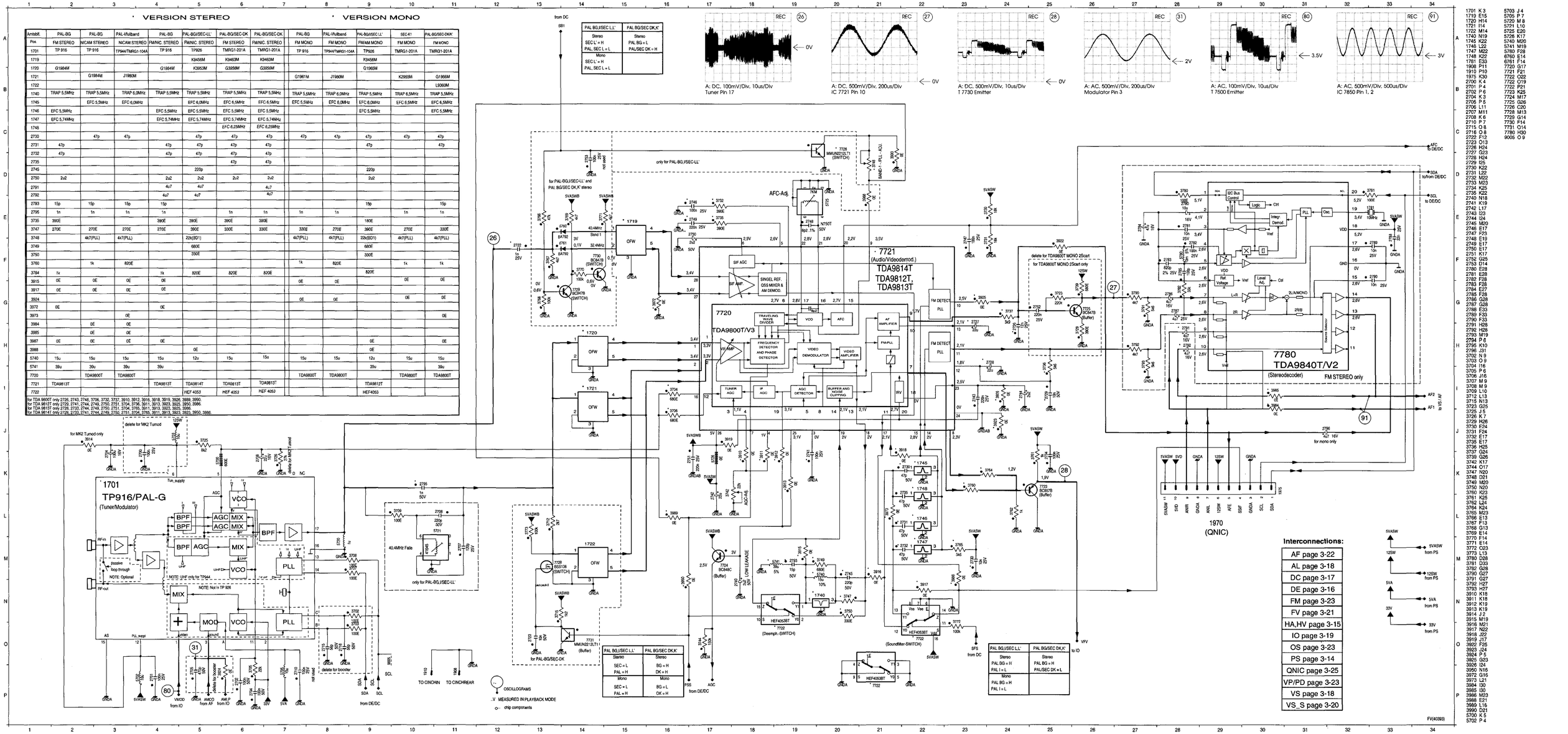
PB (63)
A: AC, 200mV/Div, 10us/Div
IC 7110 Pin 23

REC (64)
A: AC, 200mV/Div, 10us/Div
IC 7110 Pin 18

PB (65)
A: DC, 500mV/Div, 10us/Div
IC 7110 Pin 1

PB (67)
A: AC, 50mV/Div, 10us/Div
Emitter 7106

Frontend (FV)



Antibtl.	PAL-BG	PAL-BG	PAL-I/fullband	PAL-BG	PAL-BG/SEC-LL'	PAL-BG/SEC-DK	PAL-BG/SEC-DK	PAL-BG	PAL-I/fullband	PAL-BG/SEC-LL'	SEC-K1	PAL-BG/SEC-DK,K'
Pos	FM STEREO	NICAM STEREO	NICAM STEREO	FM/NIC. STEREO	FM/NIC. STEREO	FM STEREO	FM/NIC. STEREO	FM MONO	FM MONO	FM/AM MONO	FM MONO	FM MONO
1701	TP 916	TP 916	TP944/TMRG1-104A	TP 916	TP926	TMRG1-201A	TMRG1-201A	TP 916	TP944/TMRG1-104A	TP926	TMRG1-201A	TMRG1-201A
1719					K9456M	K9463M	K9463M			K9456M		
1720	G1984M			G1984M	K3953M	G3956M	G3956M			G1968M		
1721		G1984M	J1960M					G1961M	J1960M		K2953M	G1966M
1722												L3960M
1740	TRAP 5,5MHz	TRAP 5,5MHz	TRAP 6,0MHz	TRAP 5,5MHz	TRAP 5,5MHz	TRAP 5,5MHz	TRAP 5,5MHz	TRAP 5,5MHz	TRAP 6,0MHz	TRAP 5,5MHz	TRAP 6,5MHz	TRAP 5,5MHz
1745		EFC 5,5MHz	EFC 6,0MHz		EFC 6,0MHz	EFC 6,5MHz	EFC 6,5MHz	EFC 5,5MHz	EFC 6,0MHz	EFC 6,0MHz	EFC 6,5MHz	EFC 6,5MHz
1746	EFC 5,5MHz			EFC 5,5MHz	EFC 5,5MHz	EFC 5,5MHz	EFC 5,5MHz			EFC 5,5MHz		EFC 5,5MHz
1747	EFC 5,74MHz			EFC 5,74MHz	EFC 5,74MHz	EFC 5,74MHz	EFC 5,74MHz					
1748						EFC 6,25MHz	EFC 6,25MHz					
2730		47p	47p		47p	47p	47p	47p	47p	47p	47p	47p
2731	47p			47p	47p	47p	47p			47p		47p
2732	47p			47p	47p	47p	47p					
2735						47p	47p					
2745					220p					220p		
2750	2u2			2u2	2u2	2u2	2u2			2u2		
2791				4u7	4u7		4u7					
2792				4u7	4u7		4u7					
2793	15p	15p	15p	15p	15p					15p		15p
2795	1n	1n	1n	1n	1n	1n	1n	1n	1n		1n	1n
3735	390E			390E	390E	390E	390E			180E		
3747	270E	270E	270E	270E	390E	330E	330E	330E	270E	390E	270E	330E
3748		4k7(PLL)	4k7(PLL)		22k(BD1)			4k7(PLL)	4k7(PLL)	22k(BD1)	4k7(PLL)	4k7(PLL)
3749					680E					680E		
3750					330E					330E		
3760		1k	820E					1k	820E		1k	1k
3764	1k			1k	820E	820E	820E			820E		
3915	0E	0E	0E	0E				0E	0E		0E	0E
3917	0E	0E	0E	0E								
3924								0E	0E		0E	0E
3972	0E			0E								
3973			0E									0E
3984		0E	0E									
3985		0E	0E									
3987	0E	0E	0E	0E						0E		0E
3988					0E					0E		
5740	15u	15u	15u	15u	12u	15u	15u	15u	15u	12u	15u	15u
5741	39u	39u	39u	39u						39u		39u
7720		TDA9800T	TDA9800T					TDA9800T	TDA9800T		TDA9800T	TDA9800T
7721	TDA9813T			TDA9813T	TDA9814T	TDA9813T	TDA9813T			TDA9812T		
7722					HEF 4053	HEF 4053	HEF 4053			HEF4053		

for TDA 9800T only 2726, 2743, 2746, 3706, 3732, 3737, 3910, 3912, 3916, 3918, 3919, 3926, 3988, 3990.
for TDA 9813T only 2729, 2741, 2744, 2749, 2750, 2751, 3704, 3736, 3911, 3913, 3923, 3925, 3950, 3986.
for TDA 9813T only 2728, 2733, 2744, 2749, 2750, 2751, 3704, 3765, 3911, 3913, 3923, 3925, 3986.
for TDA 9814T only 2726, 2733, 2741, 2744, 2749, 2750, 2751, 3704, 3765, 3911, 3913, 3923, 3925, 3950, 3986.

PAL BG,I/SEC LL'	PAL BG/SEC DK,K'
Stereo SEC L' = H PAL, SEC L = L Mono SEC L' = H PAL, SEC L = L	Stereo PAL BG = L PAL/SEC DK = H

PAL BG,I/SEC LL'	PAL BG/SEC DK,K'
Stereo SEC = L PAL = H Mono SEC = L PAL = H	Stereo BG = H DK = H Mono BG = L DK = H

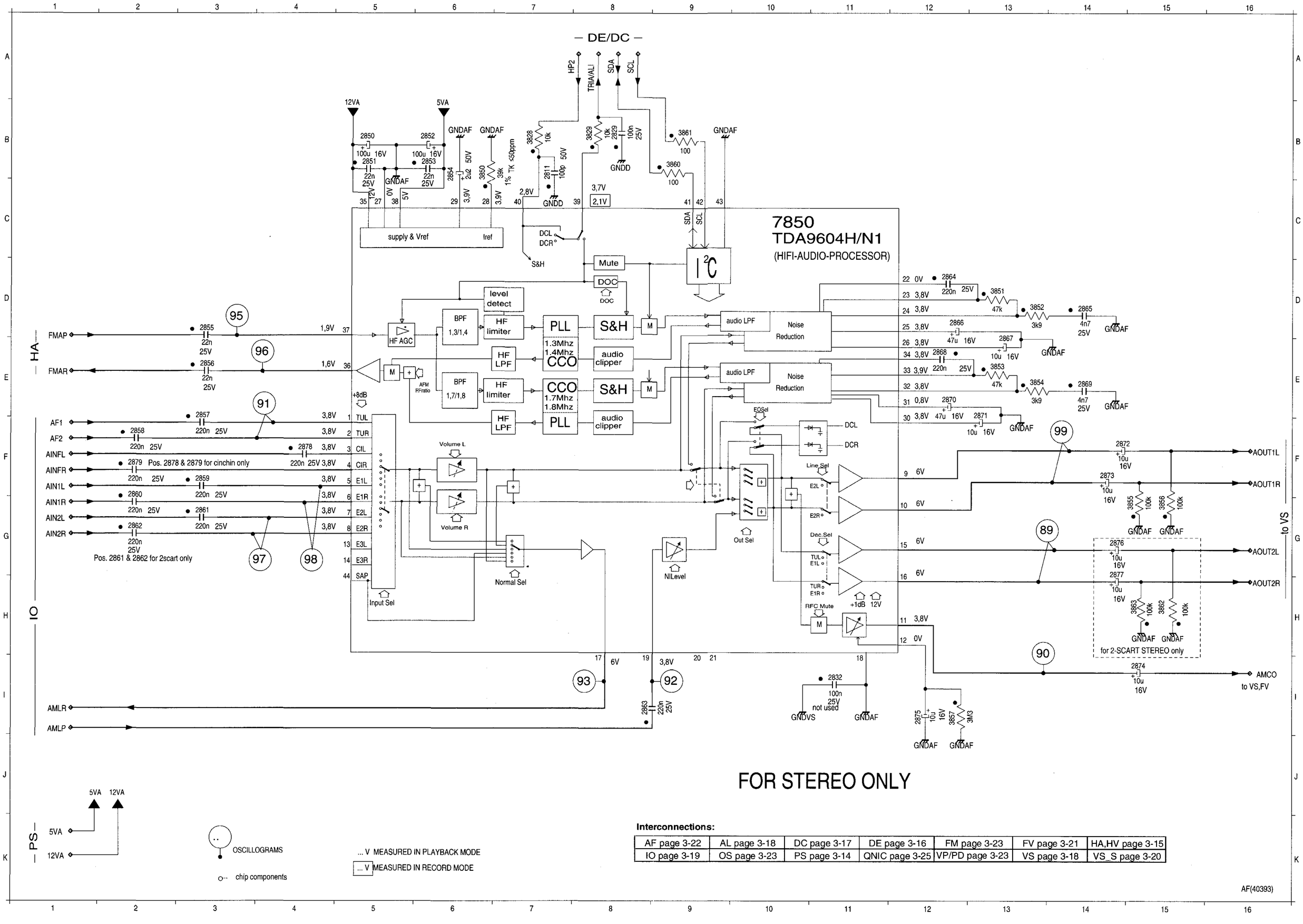
PAL BG,I/SEC LL'	PAL BG/SEC DK,K'
Stereo PAL BG = H PAL I = L Mono PAL BG = H PAL I = L	Stereo PAL BG = H PAL/SEC DK = L

A: DC, 100mV/Div, 10us/Div Tuner Pin 17
A: DC, 500mV/Div, 200us/Div IC 7721 Pin 10
A: DC, 500mV/Div, 10us/Div T 7730 Emitter
A: AC, 500mV/Div, 200us/Div Modulator Pin 3
A: AC, 100mV/Div, 10us/Div T 7500 Emitter
A: AC, 500mV/Div, 500us/Div IC 7850 Pin 1, 2

OSCILLOGRAMS
.V MEASURED IN PLAYBACK MODE
chip components

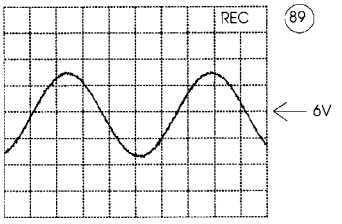
1701	K 3
1719	E15
1720	H14
1721	I14
1722	M14
1740	N19
1745	K22
1746	L22
1747	M22
1748	K22
1781	E33
1906	P11
1910	P10
1975	K30
2700	K 4
2701	P 4
2702	P 6
2704	K 3
2705	P 5
2706	L11
2707	M11
2708	K 6
2710	P 7
2715	O 8
2716	O 8
2722	F12
2723	O13
2726	H24
2727	Q23
2728	H24
2729	I25
2730	K22
2731	L22
2732	M22
2733	M23
2734	K25
2735	K22
2740	N18
2741	K19
2742	L17
2743	Q23
2744	I24
2745	M20
2746	E17
2747	P23
2748	E19
2749	E17
2751	K17
2752	G25
2753	D14
2780	E28
2781	E28
2782	F28
2783	F28
2784	E27
2785	F28
2786	G28
2787	G28
2788	F33
2789	F33
2790	F33
2791	H28
2792	H28
2793	M19
2794	P 6
2795	K10
2796	J31
3700	N 9
3703	O 9
3704	I16
3705	P 6
3706	J16
3707	M 9
3708	M 9
3709	L10
3712	L13
3715	N13
3723	G25
3725	J 5
3726	K 7
3729	H26
3730	E24
3731	F24
3732	E17
3735	E17
3736	H25
3737	G24
3739	G26
3742	K17
3744	G17
3747	N20
3748	D21
3749	M20
3750	N20
3760	K23
3761	K25
3762	L24
3764	K24
3765	M23
3766	E13
3767	F13
3768	G13
3769	E14
3770	F14
3771	E14
3772	O23
3773	L13
3780	D28
3781	D33
3782	G28
3790	G27
3791	G27
3792	H27
3793	H27
3910	K18
3911	K18
3912	K19
3913	K19
3914	J 2
3915	M19
3916	M21
3917	N22
3918	J22
3919	J17
3922	F25
3923	J24
3924	P 5
3925	Q23
3926	I24
3950	N16
3972	G16
3973	L21
3984	I30
3985	I30
3986	M23
3988	E21
3989	L16
3990	D21
5700	K 5
5702	P 4
5703	J 4
5705	P 7
5720	M 8
5721	L10
5725	E20
5726	K17
5740	M20
5741	M19
5780	F28
6760	E14
6761	F14
7720	G17
7721	F21
7722	O22
7722	O19
7722	P21
7723	K25
7724	M17
7725	G26
7726	C20
7728	M13
7729	G14
7730	F14
7731	O14
7780	H30
9005	O 9

Audio FM Processing (AF)

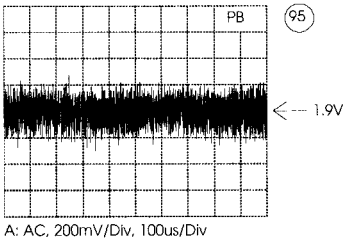


Interconnections:

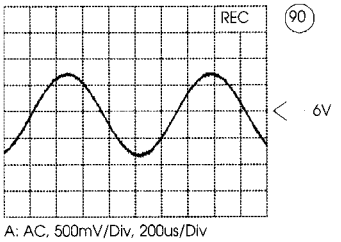
AF page 3-22	AL page 3-18	DC page 3-17	DE page 3-16	FM page 3-23	FV page 3-21	HA,HV page 3-15
IO page 3-19	OS page 3-23	PS page 3-14	QNIC page 3-25	VP/PD page 3-23	VS page 3-18	VS_S page 3-20



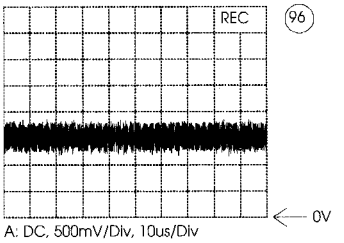
A: AC, 500mV/Div, 200us/Div
IC 7850 Pin 15, 16



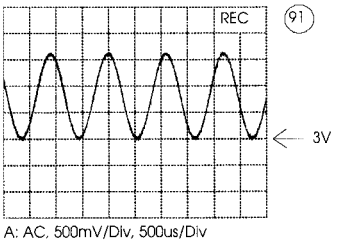
A: AC, 200mV/Div, 100us/Div
IC 7850 Pin 37



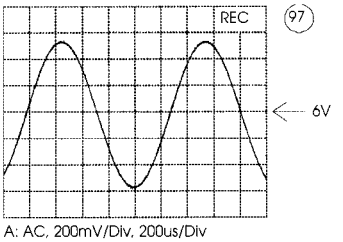
A: AC, 500mV/Div, 200us/Div
IC 7850 Pin 11



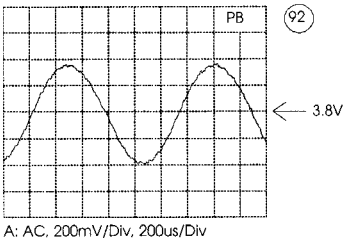
A: DC, 500mV/Div, 10us/Div
IC 7850 Pin 36



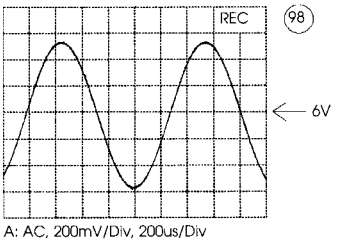
A: AC, 500mV/Div, 500us/Div
IC 7850 Pin 1, 2



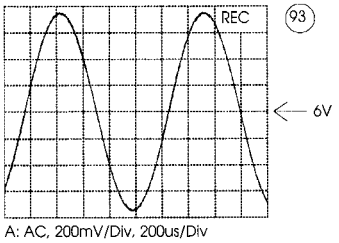
A: AC, 200mV/Div, 200us/Div
IC7850 Pin 7, 8



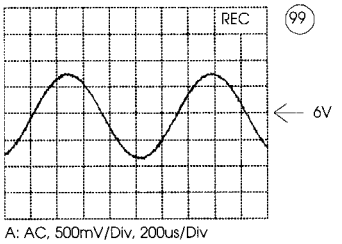
A: AC, 200mV/Div, 200us/Div
IC 7850 Pin 19



A: AC, 200mV/Div, 200us/Div
IC7850 Pin 5, 6

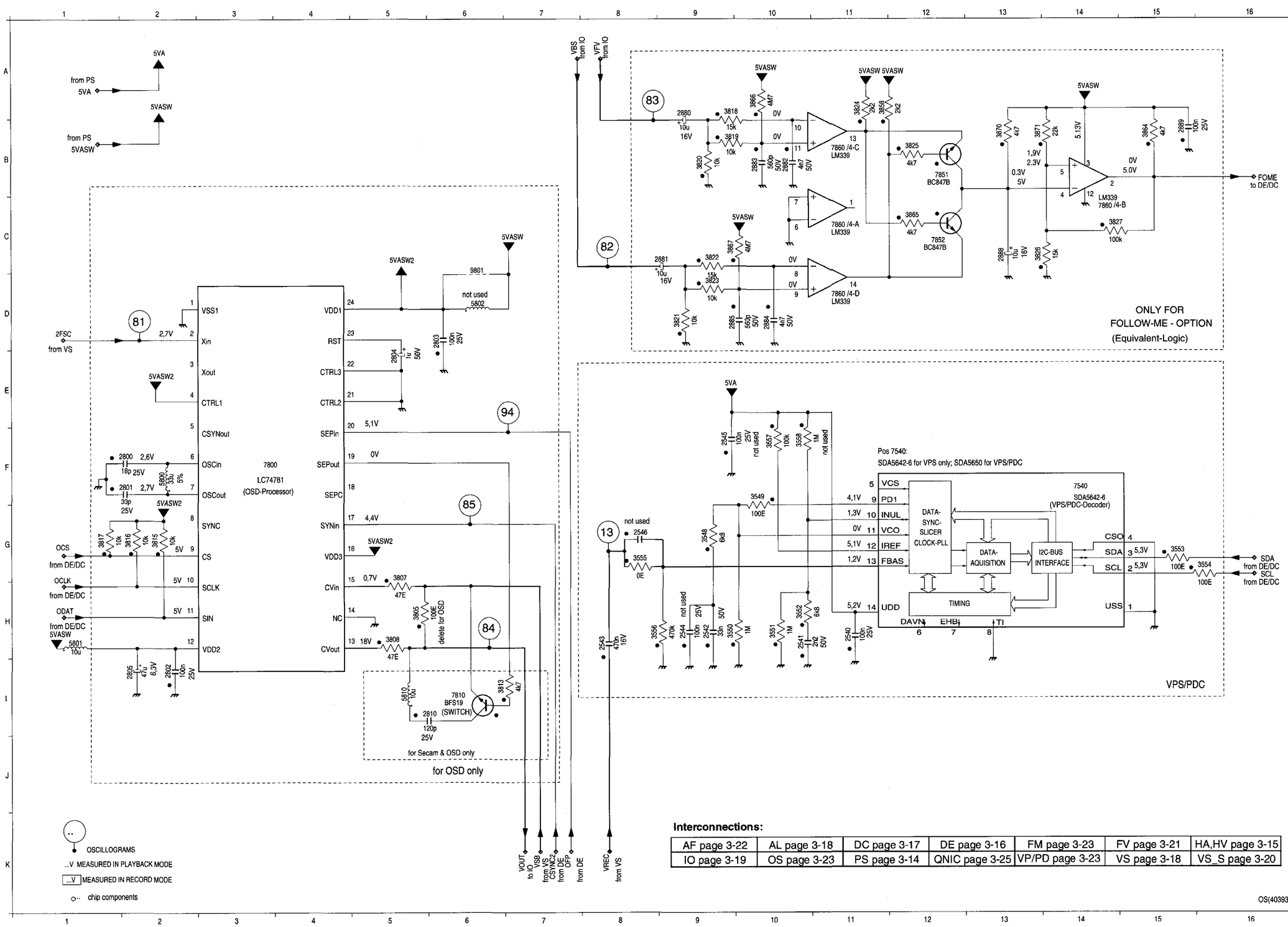


A: AC, 200mV/Div, 200us/Div
IC 7850 Pin 17



A: AC, 500mV/Div, 200us/Div
IC 7850 Pin 9, 10

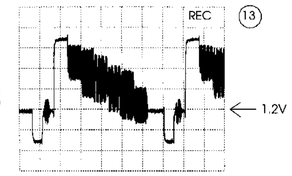
On Screen Display (OS), Follow Me (FM), Video Programming System / Programm Delivery Control (VP/PD)



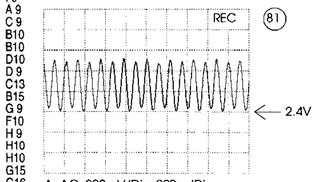
Interconnections:

AF page 3-22	AL page 3-18	DC page 3-17	DE page 3-16	FM page 3-23	FV page 3-21	HA,HV page 3-15
IO page 3-19	OS page 3-23	PS page 3-14	QNIC page 3-25	VP/PD page 3-23	VS page 3-18	VS_S page 3-20

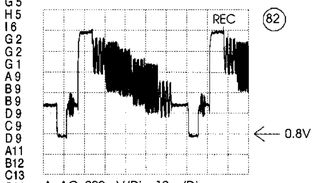
2540 H11
2541 H10
2542 H 9
2543 H 8
2544 H 9
2545 F 9
2546 G 8
2800 F 2
2801 F 2
2802 I 2
2803 D 6
2804 E 5
2805 I 2
2810 I 6
2880 A 9
2881 C 9
2882 B10
2883 B10
2884 D10
2885 D 9
2888 C13
2889 B15
3548 G 9
3549 F10
3550 H 9
3551 H10
3552 H10
3553 G15
3554 G16
3555 G 8
3556 H 8
3557 F10
3558 F10
3805 H 5
3807 G 5
3808 H 5
3813 I 6
3815 G 2
3816 G 2
3817 G 1
3818 A 9
3819 B 9
3820 B 9
3821 D 9
3822 C 9
3823 D 9
3824 A11
3825 B12
3826 C13
3827 C14
3858 A11
3864 B15
3865 C12
3866 A10
3867 C 9
3870 B13
3871 B13
5800 F 2
5801 H 1
5802 D 6
5810 I 5
7540 F14
7800 F 3
7810 I 6
7851 B12
7852 C12
7860 C14
7860 C11
7860 D11
7860 B11
9801 C 6



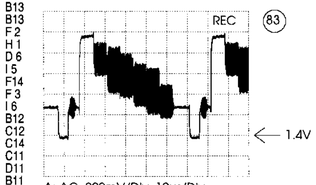
A: AC, 200mV/Div, 10us/Div
IC 7540 Pin 13



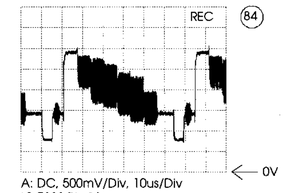
A: AC, 200mV/Div, 200ns/Div
IC 7800 Pin 2



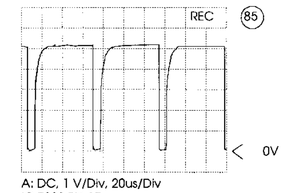
A: AC, 200mV/Div, 10us/Div
C 2881



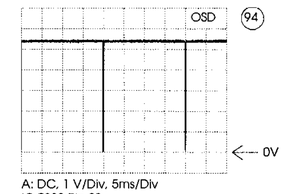
A: AC, 200mV/Div, 10us/Div
C 2880



A: DC, 500mV/Div, 10us/Div
IC 7800 Pin 13



A: DC, 1 V/Div, 20us/Div
IC 7800 Pin 17



A: DC, 1 V/Div, 5ms/Div
IC 7800 Pin 20

3-24

Nicam Board (QNIC)

7700
SAA7284ZP/M2

Interconnections:

AF page 3-22	AL page 3-18	DC page 3-17	DE page 3-16	FM page 3-23	FV page 3-21	HA,HV page 3-15
IO page 3-19	OS page 3-23	PS page 3-14	QNIC page 3-25	VP/PD page 3-23	VS page 3-18	VS_S page 3-20

A: AC, 100mV/Div, 200us/Div
Connector 1970 Pin 8

A: AC, 200mV/Div, 200us/Div
IC 7700 Pin 8, 15

A: AC, 200mV/Div, 200us/Div
IC 7701 Pin 1, 7

OSCILLOGRAMS

..V MEASURED IN PLAYBACK MODE

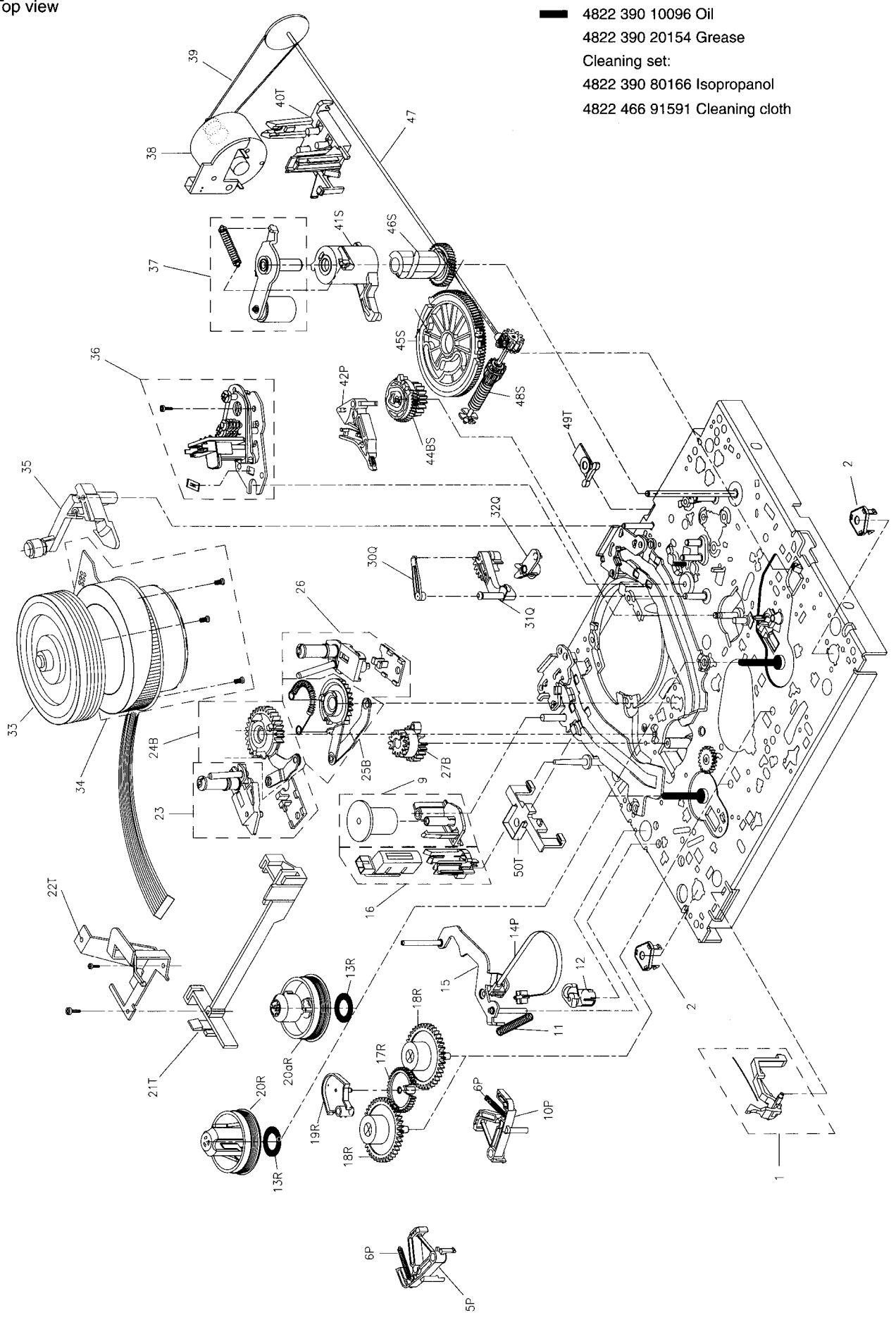
●..chip components

QNIC(40523)

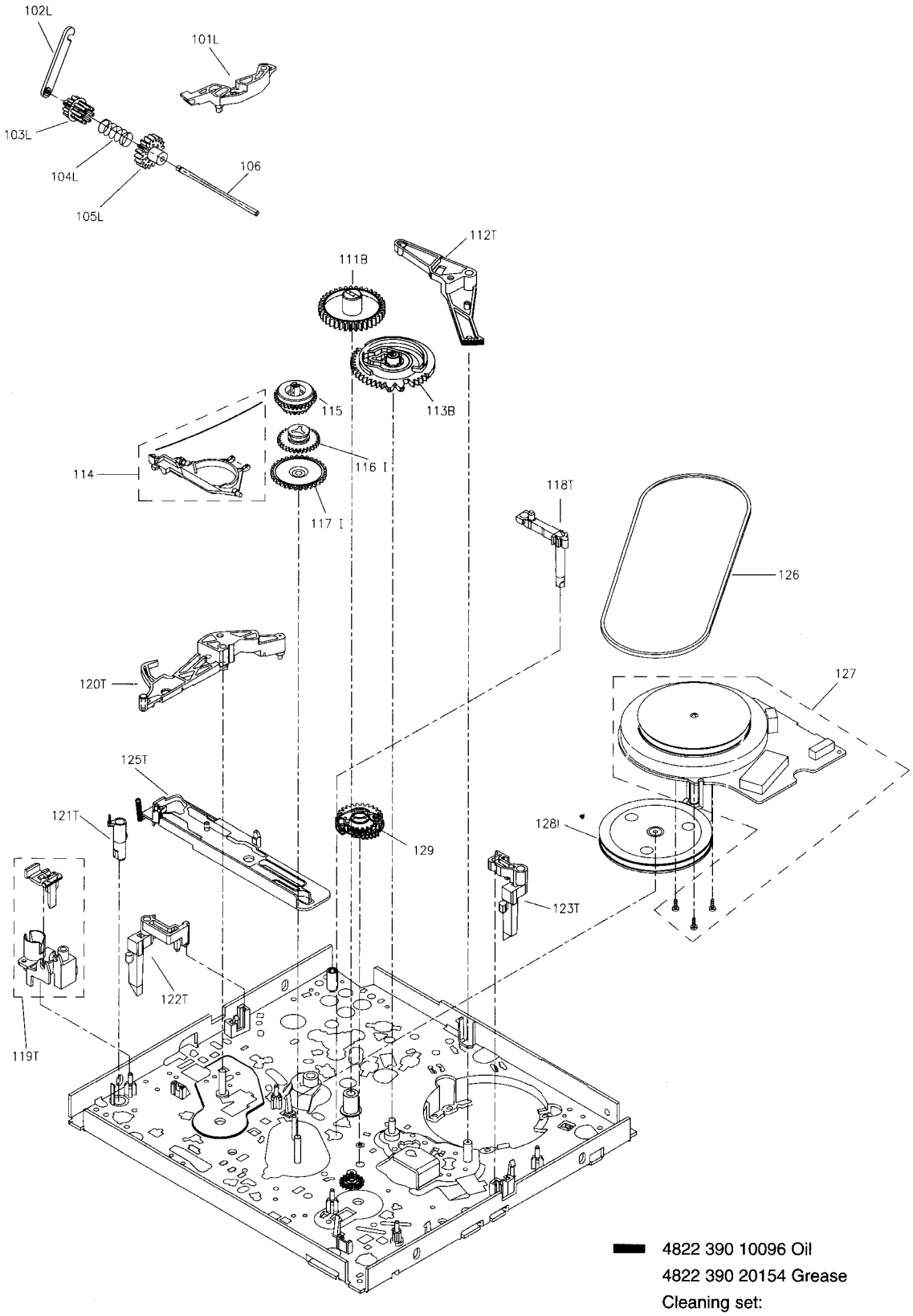
1700 J 2
1710 H 7
1970 K 2
2700 G 1
2701 G 2
2703 H 3
2704 H 4
2705 H 5
2706 H 5
2707 H 6
2708 H 6
2709 G 7
2710 H 8
2712 F12
2713 F11
2714 F11
2716 F12
2718 F12
2719 G14
2720 F14
2721 J 3
2722 E14
2723 D14
2725 B 8
2726 C 6
2727 C 3
2728 C 3
2729 D 2
2731 D 2
2732 H 6
2733 E 2
2734 E 2
2736 J 1
2752 H 9
2753 C 9
3700 G 2
3701 F 2
3702 G 6
3703 H 7
3704 F13
3705 G13
3707 D13
3708 D13
3710 B 8
3711 C 7
3712 C 6
3713 C 6
3714 C 5
3715 D 3
3720 H15
3721 G15
3722 E15
3723 E15
5700 H 7
5703 B 4
5704 E 2
5705 E13
5706 H 9
5707 B 9
6700 H 7
6701 B 7
7700 C 7
7701 D14
7701 G14

4.3 Exploded view

Top view



Underside viw



4822 390 10096 Oil
4822 390 20154 Grease
Cleaning set:
4822 390 80166 Isopropanol
4822 466 91591 Cleaning cloth

MECHANICAL PARTS LIST

Pos.	Description	KITS								Code number 4822
		B	I	L	P	Q	R	S	T	
1	Rec. protection lever (with spring)									402 10202
2	Chassis mounting spring (2x)									492 71022
5	Main brake left				P					
6	Main brake spring (2x)				P					
9	Damping roller *)									528 70782
10	Main brake right				P					
11	Tension arm spring									492 33317
12	Tension crank									403 70551
13	Slip ring						R			
14	Tension band				P					
15	Tension arm									403 70547
16	Erase head									249 10522
17	Swivelling gear						R			
18	Brake gear (2x)						R			
19	Swivelling plate						R			
20	Reel table (S)						R			
20a	Reel table (T)						R			
21	Headamplifier holder								T	
22	Bracket								T	
23	Roller unit left									528 70771
24	Loading arm left	B								
25	Loading arm right	B								
26	Roller unit right									528 70772
27	Loading gear	B								
30	Reverse clip					Q				
31	Reverse lever					Q				
32	Intermediate lever					Q				
33	Head disc 2/0									691 10583
33	Head disc 2/0-LP									691 10585
33	Head disc 4/0									691 21011
33	Head disc 4/0 Secam									691 21012
33	Head disc 4/2									691 10548
33	Head disc 4/2 Secam									691 10551
34	Scanner motor 2/0 (with screws)									361 10963
34	Scanner motor 4/0 (with screws)									361 10819
34	Scanner motor 4/2 (with screws)									361 10901
35	Cleaning roller									528 70773
36	A/C Head (with clip and screws)									249 10468
37	Pressure roller (with spring)									528 70774
38	Threading motor									361 10809
39	Threading belt									358 20421
40	Motor holder								T	
41	Pressure roller guide							S		
42	Reverse brake				P					
44	Slider gear	B						S		
45	Cam wheel							S		
46	Cam shaft							S		
47	Pulley shaft									528 81462
48	Worm shaft							S		
49	Chassis mounting clip								T	
50	WD-holder								T	

Pos.	Description	KITS								Code number 4822
		B	I	L	P	Q	R	S	T	
101	Cassette loader trigger			L						
102	Clip			L						
103	Cassette loader gear1			L						
104	Cassette loader spring			L						
105	Cassette loader gear2			L						
106	Spindle									535 93277
111	Cam wheel reverse	B								
112	Tension lever								T	
113	Cam wheel tension	B								
114	Clutch lever (with spring)									403 70549
115	Clutch									528 20736
116	Changing gear		I							
117	Double gear		I							
118	Light prism								T	
119	Init flap and holder								T	
120	Cam wheel lever								T	
121	S-VHS lever								T	
122	Prism rihgt								T	
123	Prism left								T	
125	Main slider								T	
126	Driving belt									358 31166
127	Capstan motor (with screws)									361 10805
129	Reverse kicker with transmission gears *)									522 20451
128	Gear pulley		I							
150	Lift									443 64112
KIT	B									310 31955
KIT	I									310 31963
KIT	L									310 32116
KIT	P									310 32191
KIT	Q									310 10658
KIT	R									310 10659
KIT	S									310 10661
KIT	T									310 10662

*) optional

Um eine hohen Reparaturstandard zu gewährleisten sind mit Ausnahme von Kit T immer alle im Kit enthaltenen Teile zu tauschen.

In order to guarantee a high repairstandard all spare parts included in a kit have to be replaced with the exception of kit T.

Per una riparazione garantita ocorre sostituire tutti i pezzi contenuti nei kit, fatta eccetione per il kit T.

Para obtener un estandár de reparaciones elevado,es necesario cambiar todas las partes contenidas en el kit, la única exceptión es para el kit T.

A fin d'obtenir un standard de réparations élevé, toutes les pièces de rechange incluses dans un kit sont à remplacer, exception faite du kit T.

Om een hoge reparatiekwaliteit te waarbogen moeten, met uitzondering van kit T, altijd alle zich in een kit bevindende onderdelen worden vervangen.

PARTS LISTS
Exploded View set